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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MICHAEL CHAN NCR CORPORATION 1700 SOUTH PATTERSON BLVD DAYTON, OH 45479-0001			EXAMINER SHAPIRO, JEFFERY A	
			ART UNIT 3653	PAPER NUMBER
			MAIL DATE 10/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/848,004

Applicant(s)

CIRA ET AL.

Examiner

Jeffrey A. Shapiro

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 48 and 51-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 48 and 51-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/29/07 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 48 and 51-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Copenhaver et al (US 5,859,726) in view of Petersen et al (US 5,225,978), further in view of Boss (US 6,568,675 B1) and still further in view of Bastian, II et al (US 6,650,225 B2).

Regarding Claims 48, 54 and 61, Copenhaver discloses a check processing apparatus (DH) with MICR printers (1-18), bins (14a-n), and encoding means (MICR printers), encoded documents (checks) with encoded information (MICR) read by compiler sensor (21,21') and compiler controller (1-110). See Copenhaver, col. 3, lines 40-67 and col. 4, lines 21-26 and figures 6-8.

Copenhaver does not expressly disclose, but Petersen discloses both a balancing module (213) and a reconciliation module (470) which communicate by modems (457) with host computer (400), which is analogous to Applicant's second communication interface. See figures 1-4, col. 8, lines 45-62 and col. 18, lines 28-44.

Note that the host (400) can communicate with other outside systems through data communication module (435). See col. 18, lines 21-27.

Master server workstation (451) is analogous to Applicant's subserver, since this server communicates and manages data from the balancing and reconciling modules and passes them on to the host.

Copenhaver does not expressly disclose, but Boss further discloses document bins (26, 28 and 30) which are removable, and contain electronic identification tags which contain information on the documents contained in said bins, said information being accessed by the document processing control system. See Boss, col. 3, lines 30-65.

Copenhaver does not expressly disclose, but Bastian discloses using a wireless bin module (101) which has an information display (135). See figures 1-4f and 7 as well as col. 13, lines 12-23. Bastian further discloses a first communication interface in the form of either computer/cpu/processor (20) with communication section (22) or in the form of access point module (61). See Bastian, col. 5, line 42-col. 6, line 41. Bastian discloses second communication interface at element (32) in col. 5, lines 46-48) and element (71) in col. 9, lines 37-53. Regarding the "physical checks" referred to in the independent claims can be construed as being the "routing operations" or "operating

Art Unit: 3653

instructions" disclosed by Bastian at col. 6, lines 17-25. Note also in col. 7, lines 5-9, that both text and graphics are described as being displayed on LCD panel (35f).

Regarding Claims 51, 55, 56 and 59, Bastian discloses a first manually-operable button (36) or (136) that directs the CPU to display information in sequential screens. Note that once the service or task is complete, the operator presses this button, after which information regarding the next pick are displayed. Each new display of information is construed as a "new screen". See Bastian, col. 6, lines 1-11

Regarding Claims 52, 56 and 60, Bastian discloses a second manually-operable button coupled to the processor/CPU that allows operator input concerning actual pick count taken from a bin. Pressing this button causes this adjusted pick count to be transmitted to first communication interface (22) and (61). See col. 6, lines 28-40.

Regarding Claims 53, 57 and 61, Bastian discloses means to create an audible alert signal from speaker (37), as disclosed at col. 7, lines 10-28.

Copenhaver and Boss are considered to be analogous art because they all concern document processing.

Copenhaver and Bastian are considered to be analogous art because Copenhaver concerns document processing which produces documents that require inventory management and Bastian concerns inventory management of storage areas such as shelves, drawers or bins. See Bastian, col. 3, lines 4-8.

Copenhaver and Petersen are considered analogous art because they both concern check processing systems.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have incorporated reconciliation and balance stations connected to a subserver, as taught by Petersen, in the system Copenhaver.

The suggestion/motivation would have been because Copenhaver discloses a check processing apparatus and Petersen provides details of the balancing and reconciling stations that one ordinarily skilled in the check processing art would include in order to process checks. Petersen provides further motivation in the abstract, at col. 2, lines 33-47 and at col. 4 line 60-col. 5, line 23. See Boss, col. 3, lines 30-col. 4, line-38. These passages discuss the automation of previously manual integral banking processes related to check processing.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used removable document bins having electronic identification tags, as taught by Boss, in the system Copenhaver.

The suggestion/motivation would have been to provide removable bins which can be moved from machine to machine or station to station for further document processing or document dispensing. See Boss, col. 3, lines 30-col. 4, line-38. Note also that although Copenhaver does not expressly disclose details of physical document storage, it would have been obvious to use Boss' bins so as to store processed checks in Copenhaver since Copenhaver's device processes checks and would have required a bin in which to gather and store them.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used wireless "bin modules" with second communication means on the

bins of Copenhaver, said bin modules interfacing with a control computer having first communications means, as taught by Bastian, for the purpose of increasing the accuracy of operators in performing tasks in Copenhaver's check processing environment. See Bastian, col. 1, lines 60-65.

The suggestion/motivation would have been to provide a means of increasing operator accuracy in Copenhaver's wireless communication environment, thus helping Copenhaver to reduce wired connections, **increase flexibility of system use, responsiveness and interface with operators** and reduce installation and maintenance costs. See Bastian, col. 1, line 60-col. 2, line 6 and col. 9, lines 42-49. With regards to Claims 53, 57 and 61, Bastian at col. 7, lines 19-24 provides motivation for providing auditory alarms so as to "provide a faster cue th[a]n would a visual signal".

Response to Arguments

4. Applicant's arguments filed 7/17/07 have been fully considered but they are not persuasive. As discussed above, Copenhaver discloses a check processing system. Petersen further discloses details of balancing and reconciling stations which communicate with each other as well as with a subserver. Said subserver then communicates to other systems, such as a host computer. At the time of the invention, it would have been obvious to communicate either a "reconciliation complete" or "balance complete" signal to the RFID tags and displays taught by Boss and Bastion of a particular cassette with batches of checks. Note that such completion signals are analogous to any "process complete signal" and would have been obvious in light of Copenhaver and Petersen's teachings concerning check processing.

Note that motivation for combining Bastian with Copenhaver can be found in the simple concept of increasing accuracy of operators by incorporating a flexible and responsive operator interface connected with the system. One ordinarily skilled in the art would look to Bastian's teaching of using various buttons and alarms in a wireless system environment since the operator tasks of check processing are essentially equivalent to inventory picking. Bastian solves the problem of a need for increased accuracy of operator tasks found in Copenhaver's system.

Regarding the question of "where" the wires are located in Copenhaver, note that Copenhaver is a system based on electronics and electronic communication. It is well-known that such electronic circuitry and communications, at a basic level, are wire-based. It is also well-known to incorporate wireless systems in place of wired systems, and are essentially considered functional equivalents to each other that one ordinarily skilled in the art would have found obvious to substitute for each other. Since Boss and Bastian both use wireless systems as a means to increase flexibility in their systems, it would have been obvious to incorporate such wireless aspects into Copenhaver's system to also increase system flexibility and responsiveness as well as to help improve operator accuracy in carrying out system tasks.

Regarding Applicant's claim amendments, note again that Copenhaver's apparatus encodes, i.e., prints MICR characters on each check, effectively assigning an "entry number" to each said check. The checks are then sent to bins, as disclosed by Copenhaver, which are then sent to specific bins, as taught by Bastian and Boss, as delineated above. Note that it would have been obvious to identify a particular check by

Art Unit: 3653

MICR identifier with a particular bin, since Bastian and Boss both teach identifying specific bins and their contents, as described above. Therefore, it would have been obvious to one of ordinary skill in the art to have displayed where a specific check, as identified by MICR number, is located, for the purpose of allowing for an operator to correctly retrieve a specific check as may be required.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is (571)272-6943. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.


Art Unit: 3653

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAS

September 29, 2007


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